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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

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FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of

Amendment of Section 73.622(b)
Table of Allotments
Digital Television Broadcast Stations
(Killeen, Texas)

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MM Docket No. 00-____
RM-____

To: Chief, Allocations Branch
Policy and Rules Division
Mass Media Bureau

PETITION FOR RULE MAKING

White Knight Broadcasting of Killeen License Corporation ("White Knight"), licensee of Station KAKW(TV), Killeen, Texas, by its attorneys and pursuant to Section 1.401 of the Commission's Rules, hereby requests that the Commission initiate a rule making proceeding to amend Section 73.622(b) of its Rules, the DTV Table of Allotments, by substituting Channel 13 at coordinates 30° 43' 33" N-Lat and 97° 59' 24" W-Lon as the DTV allocation for KAKW-DT in lieu of Channel 23 at coordinates 31° 18' 52" N-Lat and 97° 19' 37" W-Lon, as originally allotted. Thus, White Knight requests the following change in the DTV Table of Allotments:

	<u>Current</u>	<u>Proposed</u>
Killeen, Texas	23	13

KAKW-DT was originally allotted DTV Channel 23 with an effective radiated power (ERP) of 50 kW and a height above average terrain (HAAT) of 408 meters. The reference coordinates for KAKW-DT were based on the location of the facilities of NTSC KAKW(TV) as

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it was located on April 3, 1997.¹ Since that date, White Knight has applied for, and the Commission has granted, a construction permit to relocate the NTSC facilities of KAKW(TV) to 30° 43' 33" N-Lat and 97° 59' 24" W-Lon. *See* File No. BPCT990813LE. As set forth in the attached engineering proposal prepared by Joseph M. Davis, P.E. ("*Engineering Statement*"), Channel 13 may be allotted for DTV operations by Station KAKW at this new transmitter site with an ERP of 39.4 kW, with a non-directional antenna, and a HAAT of 553 meters. As the *Engineering Statement* demonstrates, this channel substitution complies with the requirements of Section 73.623(c) of the Rules. Specifically, as required by Section 73.623(c), the substitution of DTV Channel 13 at Killeen, Texas will comply with the principal community coverage requirements of Section 73.625(a) and is acceptable under the 2%/10% *de minimis* interference criteria.

White Knight's proposed substitution of DTV Channel 13 for its allotted DTV Channel 23 would permit Station KAKW to provide over 100 percent replication of its NTSC CP service area during the DTV transition period. The proposed substitution would also enable White Knight to operate its DTV and NTSC stations from the same transmitter site.

White Knight has filed an application for a DTV construction permit based on its allotted DTV Channel 23. *See* File No. BPCDT-19991027ADJ. If the proposal set forth herein is adopted, White Knight will amend its pending application to specify the operation of KAKW-DT on DTV Channel 13 from the coordinates referenced herein. If authorized, White Knight will construct and place KAKW-DT into operation in full compliance with the Commission's buildout schedule.

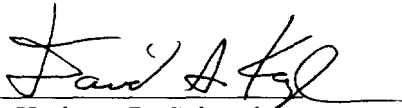
¹See 47 C.F.R. § 73.622(d)(1).

Conclusion

For the foregoing reasons, White Knight respectfully requests that the Commission initiate the rule making requested herein and substitute DTV Channel 13 for DTV Channel 23 at Killeen, Texas, at reference coordinates 30° 43' 33" N-Lat and 97° 59' 24" W-Lon, with an ERP of up to 39.4 kW and an HAAT of 553 meters.

Respectfully submitted,

**White Knight Broadcasting of Killeen
License Corporation**

By: 

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Dated: February 2, 2000

ENGINEERING STATEMENT

ENGINEERING STATEMENT
prepared for
White Knight Broadcasting of Killeen License Corporation
KAKW-DT Killeen, Texas

This engineering statement has been prepared on behalf of *White Knight Broadcasting of Killeen License Corporation* ("White Knight") in support of a *Petition for Rulemaking*. In the Federal Communications Commission's Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders on Advanced Television,¹ DTV Channel 23 was allotted as a "paired" channel for the KAKW (TV) analog Channel 62. A substitute DTV channel is proposed herein for KAKW-DT.

Discussion

The NTSC (analog) KAKW facility was recently authorized with a Construction Permit ("CP") to relocate its transmitter to a new site (file number BPCT-990813LE). Although the KAKW-DT reference (allotted) facility is based on the use of the licensed KAKW NTSC site (the facility of record on April 3, 1997), *White Knight* desires to implement its DTV facility at the new site authorized for the NTSC KAKW facility.

The new site for the NTSC KAKW CP facility is located more than 5 km from the reference site for KAKW-DT. Accordingly, a detailed interference study per §73.622(d)(1) of the Commission's Rules, and satisfaction of the 2% / 10% *de minimis* interference limits, would be required in order to utilize this site. From the NTSC KAKW CP site, the separation distance is decreased to first-adjacent KLRU-DT (DTV Ch. 22, Austin, TX, 48.2 km) and to co-channel station KHCE (TV) (NTSC Ch. 23, San Antonio, TX, 150.9 km). At these distances, interference from a maximized KAKW-DT facility on Channel 23 would exceed the Commission's *de minimis* limits.

An engineering review of the DTV allotments and NTSC assignments in the region surrounding Killeen showed that an alternate channel could be used for KAKW-DT in lieu of the allotted channel. Detailed interference studies were conducted in accordance with the terrain dependent Longley-Rice point-to-point propagation model, per the Commission's Office of

¹See MM Docket 87-268, *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, FCC 98-315, released December 18, 1998.

ENGINEERING STATEMENT

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Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, July 2, 1997 ("OET-69").² The studies showed that Channel 13 could be used for KAKW-DT at 39.4 kW effective radiated power (ERP), with a non-directional antenna. DTV Channel 13 at Killeen would provide coverage to over 100 percent of the population of the interference-limited area provided by the facility for KAKW (TV) NTSC Channel 62 authorized in its Construction Permit.

All stations considered in this study are listed in the attached **Table 1**. The results of the interference study, also summarized in **Table 1**, indicate that any additional interference to these stations meets the Commission's 2% / 10% interference limits regarding DTV proposals. Thus, this proposal is believed to be in compliance with the provisions of §73.623(c)(2) of the Commission's rules.

The technical data for the proposed Channel 13 allotment is summarized on the following page. The location and antenna height are the same as that for the authorized NTSC KAKW CP facility. The ERP as specified is the maximum value for the antenna height above average terrain involved, pursuant to §73.623(f)(7)(ii) of the Commission's Rules.

²The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein, except that the terrain profile step size is 0.1 km (which provides a finer resolution than the Commission's standard 1 km step size). A standard cell size of 2 km was used. The Longley-Rice computer program input data, following the guidelines established under OET-69, includes a location variability of 50%, a time availability of 10%, a situation variability of 50%, horizontal polarization, 0.005 S/m conductivity, a climate constant of 15, an assumption of a continental temperate climate zone, and a receive antenna height of 10 meters. The service area for each DTV facility under study is that area predicted to receive signal levels of at least 36 dB μ using the Longley-Rice methodology, and within the DTV F(50,90) 36 dB μ service contour distance as determined per §73.625(b). In instances where the DTV reference ERP is 3.2 kW, the Grade B contour of the associated analog station (authorized as of April 3, 1997) is used to determine the extent of the DTV station's service area. The service area for each NTSC facility under study is that area predicted to receive signal levels of at least 56 dB μ using the Longley-Rice methodology, and within the NTSC F(50,50) 56 dB μ Grade B contour distance as determined per §73.684(c). Comparisons of various results of this computer program to the Commission's implementation of OET-69 show good correlation.

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Summary Technical Data for Proposed DTV Channel 13 Substitution Killeen, Texas

Coordinates (NAD-27)	30° 43' 33" N-Lat 97° 59' 24" W-Lon
Channel	13
Effective Radiated Power	39.4 kW (non-directional)
Antenna Height	892 m AMSL 553 m HAAT

Channel 13 is a vacant commercial NTSC allotment for Brady, Texas, 136.5 km distant from the proposed site. According to the Commission's engineering database, there are no applications pending for use of NTSC Channel 13 at Brady. In its proceedings on Advanced Television, the Commission has stated that applications for new NTSC stations will no longer be accepted and vacant NTSC allotments are proposed to be deleted.³ Thus, based on stated Commission policies, the vacant allotment at Brady is not considered herein.

The proposed site is located 314 km from the U.S. - Mexican common border, which is beyond the 275 km zone for Mexican coordination. Further, the site is 364 km away from the nearest FCC monitoring station (Kingsville, TX), which at this distance will not be affected by the proposal.

Summary

It is proposed that KAKW-DT Killeen, Texas be permitted to substitute DTV Channel 13 in lieu of the allotted DTV Channel 23. Over 100 percent replication of the population and area coverage of the CP KAKW NTSC Channel 62 will be provided. Any interference caused to other DTV allotments or NTSC assignments meets the Commission's 2% / 10% *de minimis* limits. The

³ See Sixth Further Notice of Proposed Rulemaking, MM Docket 87-268, *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, FCC 96-317, released August 14, 1996 (para.58 - 62).

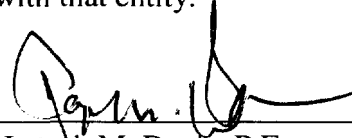
ENGINEERING STATEMENT

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comparable power utility and other operating expenses of a 39.4 kW VHF DTV facility will be reduced from that of a UHF DTV facility.

Certification

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief. Mr. Davis is a principal in the firm of *Cavell, Mertz & Davis, Inc.*, is a Registered Professional Engineer in Virginia, holds a Bachelor of Science degree from Old Dominion University in Electrical Engineering Technology, and has submitted numerous engineering exhibits to various local governmental authorities and the Federal Communications Commission. His qualifications are a matter of record with that entity.



Joseph M. Davis, P.E.

January 28, 2000

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(703) 591-0110

Table 1
INTERFERENCE ANALYSIS RESULTS SUMMARY
 prepared for
White Knight Broadcasting of Killeen License Corporation
 KAKW-DT Killeen, Texas

<u>Stations Considered</u>	<u>City, State Channel, Type</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Initial Interference Percentage (2)</u>	<u>Additional Interference Percentage (3)</u>	<u>Proposed Change in Interference Population (4)</u>	<u>Proposed Change in Interference Percentage (5)</u>	<u>Final Interference Percentage (6)</u>
KAMU-DT (Ref)	College Station, TX 12 DTV	158.2	137,000	0.0	0.0	0	--- no change in interference ---	
KSAT-TV (Lic)	San Antonio, TX 12 NTSC	163.5	1,604,036	0.4	0.0	1,494	0.1	0.5
KERA-TV (Lic)	Dallas, TX 13 NTSC	227.8	4,192,473	0.0	0.0	30,316	0.7	0.7
KERA-TV (CP)	Dallas, TX 13 NTSC	227.8	4,247,501	0.0	0.0	31,018	0.7	0.7
KTRK-TV (Lic)	Houston, TX 13 NTSC	272.3	3,898,160	0.0	0.0	21,764	0.6	0.6
KRIS-DT (*PRM)	Corpus Christi, TX 13 DTV	333.0	501,344	0.0	0.0	38	0.0	0.0

Table 1
INTERFERENCE ANALYSIS RESULTS SUMMARY
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<u>Stations Considered</u>	<u>City, State Channel, Type</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Initial Interference Percentage (2)</u>	<u>Additional Interference Percentage (3)</u>	<u>Proposed Change in Interference Population (4)</u>	<u>Proposed Change in Interference Percentage (5)</u>	<u>Final Interference Percentage (6)</u>
KVTV (TV) (Lic)	Laredo, TX 13 NTSC	385.3	142,905		--- no interference caused from proposal ---			

Notes:

- (1) For DTV stations, greater of NTSC or DTV Service Population, from FCC Table
For NTSC stations, total population within noise-limited contour
- (2) For DTV stations, 100 percent minus FCC Table initial DTV/NTSC population match
For NTSC stations, initial percent loss: percent of population within (1) predicted to receive DTV only interference from FCC Table
- (3) Additional interference experienced due to DTV facilities authorized subsequent to initial allotment table
- (4) Net change in population receiving interference resulting from proposal; numbers in parenthesis indicate a *reduction* in interference
- (5) Proposal's impact in terms of percentage, equals (4)/(1) times 100 percent: not to exceed *de minimis* limit of 2.0 percent
- (6) Total interference: equals (2) + (3) + (5); proposal may not increase (2) + (3) above 10 percent

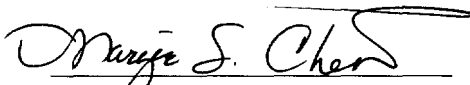
The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission's August 10, 1998 Public Notice "Additional Application Processing Guidelines for Digital Television"

* DTV Channel 13 for KRIS-DT at Corpus Christi, TX is proposed by that station's licensee as an alternative from its assigned DTV Channel 50. The baseline population shown for the proposed KRIS-DT facility is its proposed DTV Channel 13 service population as determined before consideration of the instant KAKW-DT proposal.

CERTIFICATE OF SERVICE

I, Margie Sutton Chew, a secretary in the law firm of Fisher Wayland Cooper Leader & Zaragoza L.L.P., hereby certify that on this 2nd day of February 2000, I caused to be served by hand delivery a copy of the foregoing “**Petition for Rule Making,**” on the following:

John A. Karousos, Chief
Allocations Branch
Policy and Rules Division
Mass Media Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554


Margie Sutton Chew